

Effect of intravenous Dexamethasone in diminishing Alfentanil-induced cough in Fatemi ,Ardabi.Iran

Abstract

Introduction : The use of synthetic opioids (fentanil , alfentanil ,...) Has been increasing as they can induce anesthesia without cardiovascular suppression and without histamine release which in turn decreases physiological responses to the stress caused by anesthesia and can cause and effective analgesia at first cut. Reactive cough induced by this group of drugs has been reported in various studies. This cough can cause several adverse effects and many efforts have been made in order to decrease it such as using lidocaine , ephedrine, and continuous infusion of the opioid. Therefore , our study aimed at determining effect of dexamethasone in controlling alfentanil – induced cough in Fatemi hospital, Ardabil , Iran.

Methods & Materials: In our study which was performed as a double-blinded clinical trial, 80 patients who required non-emergency surgeries requiring general anesthesia and received alfentanil , were selected, patients were categorized in ASA-I and randomly divided into two groups of 40 . The intervention group received dexamethasone , 0.15 mg/kg . 5 minutes prior to alfentanil injection while the controls received an injection of saline of the same color and volume (2 ml) . The number of coughs was counted 30 seconds after alfentanil injection and then were compared.

The data were analyzed by SPSS (15) using T-tests and chi-square. The P-value was less <0.05 considered significant.

Results: This study showed that there was not meaning difference in incident of cough between dexamethasone group with control group.in

regression analysis there was not meaningful difference in incidence of cough and variable of sex, age and BMI.

Discussion: Regarding insignificance of correlation between incidence of cough and the variables of the study, administering of dexamethasone for decreasing of incidence of alfentanil induced cough was not demonstrated. In this study, incidence of cough was more in younger subject.

Key word: Cough – Dexamethasone – Alfentanil